

Chapter 160 – Zoning:

Add:

Chapter 160-2B (Definitions and Word Use):

SMALL WIND ENERGY SYSTEM: A wind energy conversion system consisting of a wind turbine (rotor, blades, generator, alternator, tail), a tower, and associated control or conversion electronics, and which is intended primarily to reduce on-site consumption of utility power.

TOTAL HEIGHT (SMALL WIND ENERGY SYSTEM): The distance measured from ground level (including the wind turbine itself) to its highest point.

Add:

Chapter 160-7 – Renewable Energy Systems:

B. Small Wind Energy Systems - Tower

1. Provisions, regulations and conditions for small wind energy systems are as follows:

- a. Maximum Rated Capacity:** No more than one tower-mounted small wind energy system may be placed on a property and may not exceed 10 kilowatts of production.
- b. Minimum Yard Requirement:** The base of the tower shall be set back from all property lines, public rights-of-way, and public utility lines a distance equal to 1.1 times the total height. A turbine may be located at a property line by variance from the Board of Adjustment which shall consider whether the abutting property owner objects.
- c. Total Height:** Total height (including the wind turbine itself) shall not exceed 40 feet above grade and tower shall be independent of any other structures on property.
- d. Noise:** Sound produced by the system under normal operating conditions, as measured at the property line, shall not exceed fifty-five (55) dBA. Manufacturer's specifications will serve as verification of dBA levels. Any complaints that noise from the small wind energy system exceeds 55 dBA shall be accompanied by an independent certified source. This sound level may be exceeded during short-term events such as utility outages and/or severe windstorms.
- e. Appearance:** Wind turbines shall be painted in a non-obtrusive color such as the manufacturer's default color option.
- f. Compliance with Building Code:** System must obtain a building permit and must comply with applicable requirements of the International Building Code.
- g. Inspections:** A final inspection by Sussex County Building Code Official of the installation, including an electrical inspection, is required before a system may be activated.
- h. Requirement for Engineered Drawings:** Building permit applications for small wind energy systems shall be accompanied by standard drawings of the system and stamped engineered drawing of the tower, base, footings, and/or foundation (with consideration

given to specific soil conditions) as provided by the manufacturer. A manufacturer's specification sheet including a photograph of the system shall accompany the application for the building permit.

- i. **Compliance with Federal Aviation Administration Regulations:** Small wind energy systems shall comply with FAA regulations described in FAR Part 77 of the FAA guidance on airspace protection.
- j. **Compliance with National Electric Code:** Building permit applications for small wind energy systems shall be accompanied by a line drawing of the electrical components, as supplied by the manufacturer, in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code. Wiring and power lines shall be wireless or underground whenever possible.
- k. **Unsafe or Abandoned Systems:** If a system is found to be unsafe by the Building Official, the system must be repaired and made code compliant within 30 days of notification of the property owner. A system that is unused or abandoned for a period of more than 12 months shall be ordered by the Building Official to be made operational or removed within 30 days of such order.
- l. **Signage:** No signs or advertising shall be displaced on any part of a system other than the manufacturer or installer's identification and appropriate safety warning signs.
- m. **Lighting:** No illumination of the system shall be permitted unless required by the FAA, or unless the tower is also used for street or parking lot lighting, or some similar compatible use.
- n. **Safety:** Any steps or other devices to assist the climbing of the tower must start at 12' above ground level.